WHAT IS CLAIMED IS:

1. A solar cell module-mounting structure comprising: a plate-shaped member having a solar cell module fixed on one surface thereof, a first support, and a second support member, wherein said plate-shaped member is placed on an installation surface so that one side of said plate-shaped member is in contact with the installation surface, a surface of said plate-shaped member opposite to the solar cell module-fixing surface is in contact with said first support member, and out of surfaces including said one side of said plate-shaped member, at least a part of the surfaces in no contact with said first support member is in contact with said second support member.

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- 2. The solar cell module-mounting structure according to claim 1, wherein said second support member is a support member in contact with a surface of a second plate-shaped member opposite to a solar cell module-fixing surface of said second plate-shaped member to support said second plate-shaped member.
- The solar cell module-mounting structure
 according to claim 1, wherein said plate-shaped
 member is cast from a concrete material.

4. The solar cell module-mounting structure according to claim 1, wherein said plate-shaped member and said support member have the same shape and are made of the same material.

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- 5. The solar cell module-mounting structure according to claim 1, wherein said solar cell module is fixed to said plate-shaped member with an adhesive.
- 10 6. The solar cell module-mounting structure according to claim 5, wherein said adhesive is an elastic adhesive.
- 7. The solar cell module-mounting structure
 15 according to claim 5, wherein said adhesive is
 provided at a surrounding part of said solar cell
 module.
- 8. The solar cell module-mounting structure
 20 according to claim 1, wherein said solar cell module
 is composed of amorphous silicon formed on a
 stainless steel substrate.
- 9. The solar cell module-mounting structure
 25 according to claim 1, wherein an insulating member is
 placed between said one side of the plate-shaped
 member to be brought into contact with said

installation surface and said installation surface.

- 10. The solar cell module-mounting structure according to claim 1, wherein said one side has a predetermined width.
 - 11. A solar cell module array comprising the solar cell module-mounting structure according to claim 1.

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12. A photovoltaic power generation system comprising a solar cell module array according to claim 11 and a power conditioner.